

Subject: ETS MPS/Aura Engineering Release 3.4 Delivery  
Date: Fri, 10 Jan 2003 15:38:00 -0500  
From: "Ernest Quintin" <equintin@csc.com>  
To: wfuller@pop500.gsfc.nasa.gov

Willie,

We are pleased to deliver Release 3.4 of the ETS Multimode Portable Simulator (MPS) for Aura. This engineering release delivery contains code corrections to the 1553 Bus interface software to fix problems discovered during acceptance testing of Release 3.3 and to answer Discrepancy Reports (DRs) ETS0472 and ETS0473. The release also includes support for operator entry of 1750A parameter values in Engineering Units. Complete descriptions of the changes and enhancements are contained in the attachments.

There are seven attachments to this letter.

Attachment A describes the capabilities included in this release.  
Attachment B describes installation instructions for this release.  
Attachment C describes special operating instructions for this release.  
Attachment D contains the resolved DR descriptions  
Attachment E contains the system limitations.  
Attachment F contains an updated release history summary matrix.  
Attachment G contains an updated Mission Systems Configuration Management (MSCM) form.

The updated software executable modules are being delivered on CD-ROM. Two copies of the CD will be given to Guy Cordier, who will forward one copy to Raytheon at Denver and will use the other for installation on the MPS simulator PCs in Building 32.

The updated software is also being installed on the serial card-equipped PCs in the Bldg 25 Simulations Operations Center, in the event that any of those units are needed to support upcoming Aura data flows.

The System User's Guide is being updated to include the new capabilities.

If you have any questions about this delivery, please do not hesitate to contact me or Estelle Noone.

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## Attachment A – Summary of Operational Changes

### Operational Capabilities of MPS/Aura Release 3.4

New or modified capabilities with this release are noted in **Bold**.

#### Telemetry:

- Transmit telemetry in IP or Serial (clock/data) mode
- Pack telemetry packets and CLCWs into CADUs when in Serial mode
- Generate one stream of CADUs when in Serial mode
- Generate one stream of telemetry formatted as EDUs when in IP mode
- Start or stop one telemetry stream
- Generate telemetry packets from information contained in the PDB
- Maintain telemetry nodes from information contained in the PDB
- Populate telemetry packets with data values from information contained in the PDB
- Generate correct secondary headers for SC, GIRD, and SUROM-TIE (no secondary header) telemetry packets using information from the PDB
- Generate instrument telemetry packets using secondary key information from the PDB
- Display EDU data when in IP mode
- Display CADU data when in Serial mode
- Set values into telemetry points by mnemonic
- Display telemetry node values by mnemonic
- Convert telemetry values to Engineering Units (EU) for display using information from the PDB
- Accept operator-entered telemetry values in EU and convert to Raw Counts for inclusion in telemetry packets
- Reset packet count for the telemetry stream
- Static packet data can be overwritten (by byte location) and by modification of telemetry mnemonic
- Incrementing packet sequence counters per APID
- Generation of individual APIDs can be inhibited
- Telemetry logs will be created (viewable by offline utility)
- Packet Headers and Packet Data are updated
- Packet data can be shown in hexadecimal or octal format and addressed in hexadecimal or decimal form
- Packet Sequence Counters can be reset
- Packet Sequence Counters can be modified
- Packet Version field can be modified
- Packet APID field can be modified
- Packet Type field can be modified
- Packet Secondary Header Flag field can be modified
- Packet Length field can be modified
- CCSDS Unsegmented TimeCode (CUC) can be modified

- Packet rate may be controlled
- CLCW transmitted via EDUs when in IP mode
- IP packets are transmitted with variable lengths
- CLCW can be overridden by the operator
- Transmission of CLCW can be inhibited when in IP mode
- Scenario file (script) capability to set telemetry nodes and buffers
- Set telemetry data values in response to spacecraft commands received (end-item verification)
- Set initial telemetry data values at initialization
- Allow simultaneous display and set of multiple telemetry container items via GUI screens
- Simulate spacecraft memory dumps
- Use the PDB telemetry state text file to locate end-item verifier values
- Maintain and update telemetry data values in APID 1000
- Telemetry parameters may be set and viewed by Parameter ID
- CLCW Transmit Start and Stop is coupled to H/K Telemetry Start and Stop
- Telemetry values may be set using simple expressions
- Telemetry values may be set using trigonometric expressions
- Telemetry values may be set using Boolean expressions
- Telemetry values may be set to other telemetry mnemonic values
- Telemetry values may be saved in intermediate variables for later use
- TES Segmented Packets are emulated
- CLCW Transmit rate may be set by the operator
- Telemetry data values are validated for fit into packet space
- Current enable status and transmit rate for all APIDs is viewable via status display
- vcProcessor module discards VC63 VCDUs when creating files for playback
- The PDB Red/Yellow Limits file is used to refine initial telemetry values.
- Signed telemetry data values are validated as one's and two's complement integers upon user input, as appropriate.
- Displays of telemetry and command container item names may be saved and restored.
- The VCDU Sequence Counter field occupies 32 bits in APID 1000.
- Direct ingest of telemetry-related PDB flat files
- Interface with a 1553 Bus. Transmit telemetry packets over the 1553 Bus.
- Accept telemetry and CLCW packets from an external source in IP mode
- Update telemetry parameter values to reflect data received from the external source
- Update CLCW field values to reflect data received from the external source.
- Forward, via IP interface, the telemetry and CLCW packets received from the external source.
- Modify telemetry parameter values and CLCW field values in externally received packets prior to re-transmission, in response to operator directive.
- Accept CADUs from an external source in serial mode
- Extract telemetry packets and CLCWs from externally received CADUs

- Pack externally received telemetry packets and CLCWs into CADUs and forward via serial interface
- **Preserve time in Secondary Headers of externally received telemetry packets OR replace with MPS-generated time.**
- **Support for operator entry of 1750A telemetry values as Engineering Units.**

Command:

- Identify commands using information from the PDB
- Display event messages with command mnemonics and submnemonics
- Set telemetry points in response to commands received (end-item verification) using information from the PDB
- Recognize spacecraft Command Loads
- Display Command Load data
- Copy Command Load data to a Memory Dump buffer
- Inhibit the Command Load data copy facility via operator directive
- Validate checksums of received Command Loads
- Ingest type AD, BC, and BD commands
- Display Total CLTUs count
- Reset Total CLTUs count
- Display Rejected CLTUs count
- Reset Rejected CLTUs count
- Display Instrument commands count
- Reset Instrument commands count
- Display Spacecraft commands count
- Reset Spacecraft commands count
- Display BC commands count
- Reset BC commands count
- Display BD commands count
- Display current Spacecraft CLCW
- Update Spacecraft and instrument CLCW
- Display current Instrument CLCW
- Validate commands based on individual, all, or none of the following validation criteria: CLTU Start and Tail Sequences, BCH Error Code, Transfer Frame Header Fields, FARM (Valid Frame Sequence), User Command Packet Header
- Generate event messages based on ingest
- Log raw commands (viewable by offline utility)
- Display raw command in hexadecimal or octal format addressed in either hexadecimal or decimal fashion
- Display command packet headers for instrument commands
- Display command packet headers for spacecraft commands
- Update command accepted and rejected counters in telemetry

- Command submnemonics are saved in container items and may be viewed after command receipt
- Expected Spacecraft ID changed to CC Hex
- TES and OMI segmented commands are recognized.
- The Function Code is used to identify HIRDLS commands.
- The two's complement checksum of instrument commands is validated.
- Direct ingest of command-related PDB flat files
- Enable and disable automatic setting of end-item verifier telemetry points for commands received, in response to operator directive.
- Interface with a 1553 Bus. Receive command packets from the 1553 Bus.

#### Time:

- Maintain and update SC time (GIRD)
- Maintain and update GMT time
- Synchronize SC and GMT times
- **Set SC time to time in externally received telemetry packets.**

#### General:

- Control all simulator module functions via scenario scripts
- Selection of scenario scripts may be via operator type-in or via a file selection browse window
- Start scenario scripts in response to commands received
- Start a scenario script from a scenario script
- Execute multiple scenario scripts simultaneously
- Provide operator control of multiple scenario scripts started by the operator
- Save the last 10 operator directives
- Allow editing of saved operator directives before re-execution
- EDOS Service Header (ESH) fields may be viewed
- ESH field contents may be modified by the operator
- Validation of Command Data Block (CDB) header fields of commands received
- Modification of expected values of CDB header fields
- All viewable buffers may be displayed
- Addition, deletion, and modification of command end-item verifiers via SQL scripts
- Logs of commands received or telemetry transmitted may be retransmitted via IP output or Serial output
- Expected Spacecraft ID may be modified in EOSGS module
- CLCW ESH field contents may be modified by the operator
- Event messages to the screen may be inhibited or enabled by severity (color)
- Scenario scripts may contain IF-then-ELSE-ENDIF and WHILE-ENDWHILE conditional execution directives

- The Scenario module may interface with multiple modules
- Intermediate variables A – Z permit saving values as real numbers – extended to all modules that accept directives
- Intermediate variables Aq – Zq permit saving values as long integers – extended to all modules that accept directives
- The Serial Output module can accept directives from the operator or via a scenario script.
- The Event Message window has been separated from the project window and has been made resizable.
- Receipt of CADUs from a serial interface and extraction of telemetry packets is via the EOSXtract module.
- Interface with the 1553 Bus is via the E1553Bus module.

## **Attachment B – Installation Instructions for MPS/Aura Release 3.4**

This attachment contains the instructions for installing the PDB files and the MPS/Aura Release 3.4 Server and Client. The information presented in this attachment is divided into three major sections. The first section contains abbreviated installation instructions, the second contains a summary of the installation changes, and the third section contains detailed instructions for performing initial and subsequent installations.

**The abbreviated installation instructions assume that the user will install the recommended version of the Java Runtime Engine, JRE 1.2, Build 14. If the user desires to remain with the currently installed version of Java, consult the directions for modifying the Client startup batch file in the detailed instructions section.**

The information presented in this attachment has been checked for accuracy by the independent test team.

### **B-1: Abbreviated Installation Instructions**

These instructions are intended for the experienced user.

1. Install the Java Runtime Engine, Build 14, by selecting the file **jre-1\_2\_2\_014-windows-i586.exe** in the root folder of the CD and following the prompts.  
**IMPORTANT:** When prompted for an installation folder, modify the path to **C:\jre1.2.2**. See the detailed instructions for more information.
2. Install the MPS/Aura Release 3.3 Client software by executing the **Setup.exe** program in the Client folder of the CD.
3. Install the MPS/Aura Release 3.3 Server software by executing the **Setup.exe** program in the Server folder of the CD.
4. If not previously done, create a folder under **D:\mps\_pdb\AuraPDBs** to hold the Aura PDB source files. Copy the Aura PDB source files into this new folder. Twelve files are needed. See the list in Paragraph B-3.3 for the files to be copied.
5. When initializing the MPS/Aura simulator for the first time, all Projects needed must be built and saved.



## **B-2: Summary of changes**

Patch Build 14 of Version 1.2.2 of the Java Runtime Engine (JRE) is being included with this delivery. Testing has shown that Sun Microsystems has fixed many of the resource leaks that were a problem with earlier versions of the JRE.

## **B-3: Detailed Installation Instructions**

This is the complete procedure for performing an initial or subsequent installation of the MPS/Aura simulator Release 3.4, and associated software, data files, and COTS programs on a PC.

Materials Needed:

- One or more versions of the Aura Project Data Base (PDB)
- The CD containing the MPS/Aura Release 3.4 software

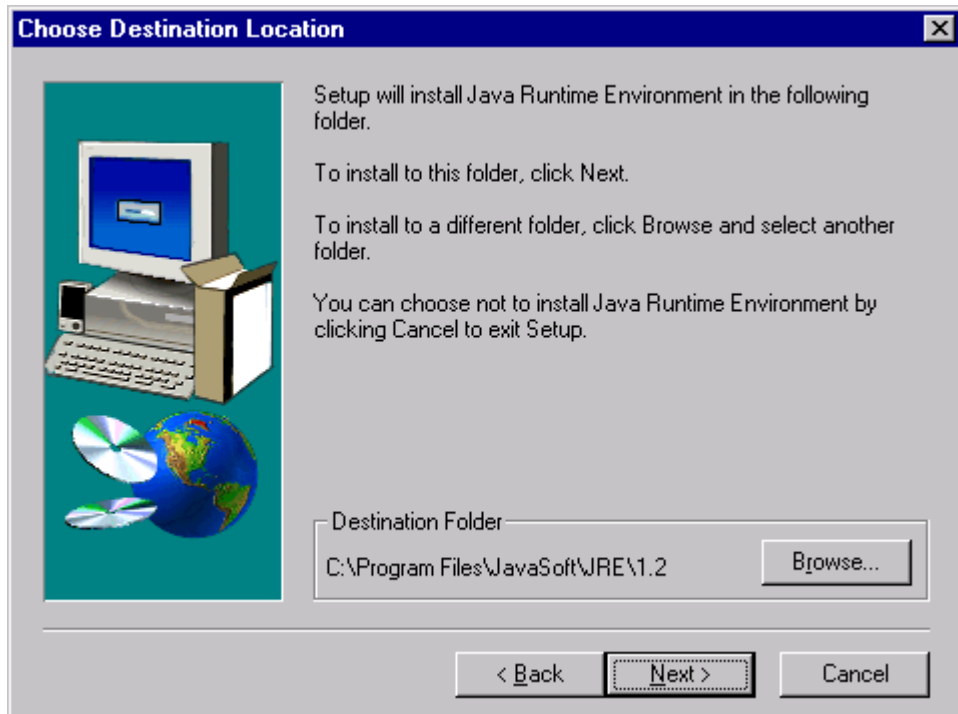
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### **B-3.1: Java Runtime Engine Installation**

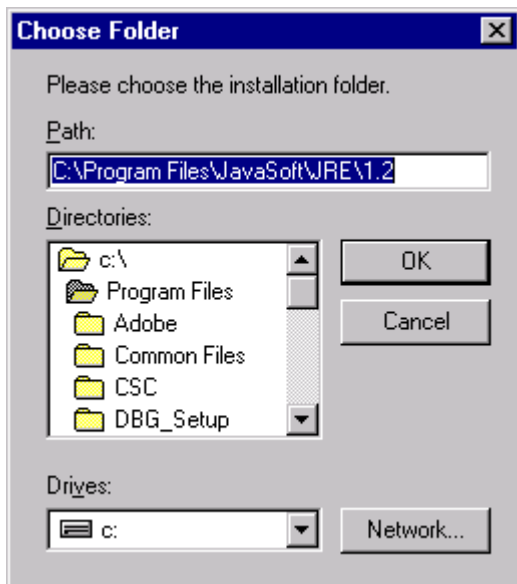
Patch Build 14 of Version 1.2.2 of the JRE is included on the delivery CD. It is recommended that this version of Java be installed.

1. Insert the CD containing the MPS/Aura Release 3.4 into the CD drive and navigate to it using either Windows Explorer or My Computer.
2. Double-click on the file named **jre-1\_2\_2\_014-windows-i586.exe** in the root folder. This will cause the Java Runtime Engine to be installed. When responding to the installation prompts, set the installation folder to **C:\jre1.2.2** by modifying the installation path as shown in the following pictures. This is necessary because the DOS program that starts the Client software cannot parse spaces in the path.

When the **“Choose Destination Location”** window appears, click on the Browse button.



The result will be the following **“Choose Folder”** browse window:



Modify the path in the **Choose Folder** browse window to be **C:\jre1.2.2** as shown in the following picture. Select **OK**, then select **NEXT** from the **Choose Destination Location** window.

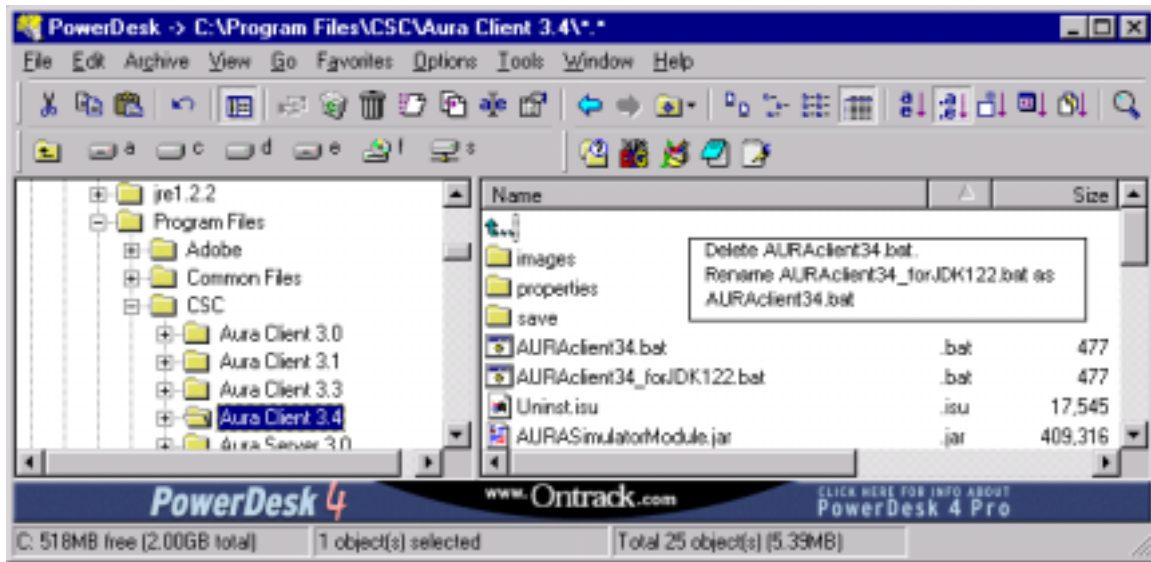


### **B-3.2: Installation of the Aura Server and Client software**

The steps in this paragraph cause the MPS/Aura Client and Server software to be installed on the PC.

1. Insert the delivery media into the appropriate drive.
2. To install the Aura Client:
  - a) On the desktop, click on the Start button, and then select Run from the resulting menu.
  - b) When the Run window appears select the Browse... button.
  - c) From the Browse Window, select the Removable drive that contains the installation CD.
  - d) Click on the Client folder.
  - e) From within the Client folder, double click on the **Setup.exe** filename.
  - f) A window with the title "Run Window" will appear. Click on the Okay button to proceed to the next step.
  - g) The screen will be filled with an Aura Client background and a smaller window with the title "Welcome to Aura Client 3.4" will appear. Click on the Next button to proceed to the next step.
  - h) The next window will contain the licensing agreement. Click on Yes to accept the agreement and proceed.
  - i) After all of the files are copied, a window with the title "Setup Complete" will appear. Click on the Finish button to end.
  - j) An Aura Client icon will now be installed on the desktop.

3. If the newer version of the Java JRE was not installed, you must rename the Client startup batch file. Follow these steps.
  - a. Using either Windows Explorer or My Computer, navigate to the **C:\Program Files\CSC\Aura Client 3.4** folder.
  - b. As indicated in the following picture, delete the original **AURAcient34.bat** file.
  - c. Rename **AURAcient34\_forJDK122.bat** as **AURAcient34.bat**.



4. To install the Aura Server:
  - a) On the desktop, click on the Start button, and then select Run from the resulting menu.
  - b) When the Run window appears select the Browse... button.
  - c) From the Browse Window, select the Removable drive that contains the installation CD.
  - d) Click on the Server folder.
  - e) From within the Server folder, double click on the **Setup.exe** filename.
  - f) A window with the title "Run Window" will appear. Click on the Okay button to proceed to the next step.
  - g) The screen will then be filled with an Aura Server background and a window with the title of "Welcome to Aura Server 3.4" will appear. Click the Next button to proceed.
  - h) The next window will contain the licensing agreement. Click on Yes to accept the agreement and proceed.
  - i) Next a window will show the completion status as the files are copied. When the copying is complete click on the Finish button to finish the installation.
  - j) An Aura Server icon will be installed on the desktop.

### **B-3.3: PDB Download**

The next step is to copy the PDB onto the hard drive. You will need at least one version of the Aura PDB. The following PDB flat files are needed, where *xxxxxx* corresponds to the version portion of the filename:

```
cmd_desc_xxxxxx.pdb  
cmd_fixdata_xxxxxx.pdb  
cmd_parm_xxxxxx.pdb  
cmd_vardata_xxxxxx.pdb  
cmd_verify_xxxxxx.pdb  
t1m_calcurve_xxxxxx.pdb  
t1m_desc_xxxxxx.pdb  
t1m_dstate_xxxxxx.pdb  
t1m_packet_xxxxxx.pdb  
t1m_parm_xxxxxx.pdb  
t1m_polyconv_xxxxxx.pdb  
t1m_rylim_xxxxxx.pdb
```

Add a folder to your chosen directory structure to hold the source files of the Aura PDB.

Copy the desired version of the PDB into the folder just created. If desired, more than one version of the PDB may be copied. Be sure to copy each version into its own folder.

## Attachment C - Special Operating Instructions

This attachment contains new special operating instructions for MPS/Aura Release 3.4. The information presented in this attachment has been checked for accuracy by the independent test team.

A User's Guide is being updated to include the information presented in this section. When complete, the User's Guide will be available from the ETS home page at <http://esdis-it.gsfc.nasa.gov/ETS>

### E1553Bus module changes

The E1553Bus module status display has been modified as shown below. Unnecessary displays have been eliminated.

The screenshot shows a window titled "E1553Bus #0 Status". It contains two tables of data and several control buttons.

RT#	TLM Xmitted	APID Number	Pkt Length
1	0	0	0
2	0	0	0
3	0	0	0
9	0	0	0
Unknown	0	0	0

Buttons: Reset, Reset All

RT#	Cmds Received	APID Number	Pkt Length
1	0	0	0
2	0	0	0
3	0	0	0
9	0	0	0
Unknown	0	0	0

Buttons: Reset, Reset All

Close

## **Processing of externally received telemetry**

**All simulator directives described in the following paragraphs should be directed to the SCAura module.**

With Release 3.4, two modifications have been made to the processing of externally received telemetry. First, the user has been given the ability to remove telemetry value changes from individual telemetry points. Second, when receiving external telemetry packets, MPS/Aura will synchronize its spacecraft time to the time value from those packets.

The ability to remove user-applied changes to externally received telemetry has been added. The user may clear the update vector for a single telemetry point or for all telemetry points at once. The container item name is **removeUpdates**.

To clear the user-applied changes from all telemetry parameters, enter the directive as:

**Set removeUpdates ALL**

To clear the user-applied changes from a single telemetry parameter, specify either the telemetry parameter mnemonic or its Parameter ID in place of “ALL”. Eg. Either of the following directives will accomplish the same action because 3879 is the Parameter ID for GNC\_SS\_STATWD02.

**Set removeUpdates GNC\_SS\_STATWD02**

**Set removeUpdates TLM#3879**

By default MPS/Aura now preserves the Secondary Header time in externally received telemetry packets. Furthermore, MPS/Aura extracts the time from received packets so as to maintain internal time synchronization with externally received data. The result is that time placed into MPS-generated telemetry packets will be in sync with re-transmitted external data.

This capability may be turned off by clearing the container item, **UseExternalPacketTime**. The syntax is:

**Set UseExternalPacketTime 0**

After this directive is entered, MPS will overwrite all telemetry packets with its internally generated time. To return to preserving the Secondary Header time from externally received packets, enter

**Set UseExternalPacketTime 1**

### **Processing of 1750A Telemetry Parameters**

With Release 3.4, MPS/Aura will convert floating point values entered for 1750A telemetry points to the proper bit pattern, and will convert 1750A bit patterns to floating point for display. For example, entering the directive

Set EPS\_SS\_POLRCURR\_\_EU 8.5E37

will result in the bit pattern 0x7FE4CF7E being transmitted in the telemetry point EPS\_SS\_POLRCURR.

Remember, when entering telemetry mnemonics as Engineering Units, two underscores are appended to the mnemonic.



## **Attachment D – Resolved Discrepancy Reports**

In addition to the new capabilities, the following Discrepancy Reports (DRs) and Change Requests (CRs) have been closed by and are being delivered with MPS/Aura Release 3.4. The DRs/CRs are listed in the table below, which provides the DR/CR Number, Status, Severity, and a short description. A full description of each DR/CR follows the summary table. Complete information on all DRs/CRs may be accessed via the Internet at address <http://edosultra30.gsfc.nasa.gov/ddts/>

### **Summary of Closed Discrepancy Reports**

<b>Critical (Severity 1)</b>	<b>Urgent (Severity 2)</b>	<b>Routine (Severity 3)</b>	<b>Change Requests</b>	<b>Total</b>
0	2	0	0	2

### **Status Definitions**

N – New	A – Assigned Analysis	R – Analysis Entered
V – Assigned Verification	T – Tested	C – Closed
W – Withdrawn	P – Postponed	X – Duplicate

<b>ETS No.</b>	<b>SMO No.</b>	<b>Type</b>	<b>Severity</b>	<b>Description</b>
ETS0472	SMOdr17551	DR	3	Stopping SCAura to load PDB causes GUI crash.
ETS0467	SMOdr17816	DR	3	Cmd Sub-mnemonics not shown in Event window

DR: SMOdr18775 (ETS0472)      Related NCR:      Submitted: 021216  
Status: NEW      Class: ETS

Title: MPS Packet Header time not synched with ETSF

SUBMITTAL INFORMATION

Project: ETS  
DR Type: Problem  
Rel/Ver: 3.3  
Subsystem: Aura  
Module: Simulator  
Affected-Requirement:  
Test Phase: acceptance test  
Severity: 2  
Date found: 021211  
Location: GSFC  
Submitter: Ernest Quintin  
Organization: ETS Dev Group  
Phone number: 301-805-3649  
Email: equintin@csc.com

\*\*\*\*\* Problem (Added 021216 by equintin) \*\*\*\*\*

When receiving and forwarding telemetry from ETSF, MPS replaces the time in the packet secondary headers with its own time. The time received from ETSF should be preserved when transmitted from MPS.

\*\*\*\*\* History \*\*\*\*\*

batchbug 021216 160110 Submitted to ETS by equintin  
batchbug 021216 160110 Enclosure "Problem" added by equintin

DR: SMOdr18776 (ETS0473)      Related NCR:      Submitted: 021216  
Status: NEW      Class: ETS

Title: Cannot efficiently restore telemetry to ETSF values

SUBMITTAL INFORMATION

Project: ETS  
DR Type: Problem  
Rel/Ver: 3.3  
Subsystem: Aura  
Module: Simulator  
Affected-Requirement:  
Test Phase: acceptance test  
Severity: 2  
Date found: 021211  
Location: GSFC  
Submitter: Ernest Quintin  
Organization: ETS Dev Group  
Phone number: 301-805-3649  
Email: equintin@csc.com

\*\*\*\*\* Problem (Added 021216 by equintin) \*\*\*\*\*

After updating any telemetry points in the Front End MPS, there is no efficient way to restore to the value received from ETSF.

\*\*\*\*\* History \*\*\*\*\*

batchbug 021216 160441 Submitted to ETS by equintin  
batchbug 021216 160441 Enclosure "Problem" added by equintin

## Attachment E – System Limitations

### H.1 MPS/Aura Release 3.4 Limitations

The following limitations apply to MPS/Aura Release 3.4. Some of these are Discrepancy Reports (DRs) against SIMSS baseline products and have been recorded in their DR repository.

Problem Description	Workaround
The Scenario module File Selection window does not always show all of the files in the selected folder.	Click the Accept button of the File Selection window without selecting any file. Then type the scenario file name into the Filename field of the Scenario Control window, or copy and paste it from Windows Explorer.
The Save Project (Extended) and Restore From (Extended) options are intended for another application where a remote server runs simultaneously with the local application. The options are included with MPS/Aura so that only one version of the NeTTCore code needs to be maintained.	Avoid use of the Save Project (Extended) and Restore From (Extended) options.
The Generic Container Buffer display is limited to 1400 bytes of data (= 700 words, or 350 double words). A request for more data than that will result in a display of 1400 bytes of information. <i>This is SIMSS Defect # 102.</i>	To view data that is beyond byte 1400 of the buffer, set the offset to 1400, or as required to view the data.
If the user forgets to load a PDB when initializing the simulator, Stopping the SCAura module to load the database will result in a Client GUI crash. This has been written up as an MPS DR ETS0465.	Use Run/Stop and Run/Unlock to stop the entire Project.
Certain APIDs are included in the PDB tlm_packet file without any Interval or Slot number information. MPS supplies a default Interval of one second and a default Slot number of zero. However, the packet timing appears to be less accurate than for those APIDs that have at least one Interval field filled in the tlm_packet file. More investigation is necessary before writing this as an MPS DR.	Explicitly supply an Interval when enabling an APID that has no non-zero Interval in the tlm_packet file.

Problem Description	Workaround
The E1553Bus module will crash MPS if it is invoked on a PC that does not have a 1553 Bus interface board installed.	Avoid adding the E1553Bus module to any Project if the PC does not have a 1553 Bus interface board.
When converting 1750A parameter values to Engineering Unit Floating Point format, MPS rounds the result to six decimal places.	External calculations may be used to check the accuracy of the raw values transmitted in telemetry.

## **Attachment F - Release History Summary Matrix**

Attached is the MPS/Aura simulator release history summary matrix, updated to reflect the MPS/Aura Release 3.4 delivery. Modules inherited from the SIMSS baseline have the SIMSS Release Number, while the MPS/Aura modules EOSGS, EOSXtract, E1553, and SCAura have their current Release Number.

## Release History Summary Matrix

**System:**        **MPS/Aura**

<b>Release Number</b>		1.0	2.0	3.0 Beta	3.0	3.1	3.2	3.3	3.4					
<b>Delivery Date</b>		3/16/01	6/15/01	9/28/01	1/11/02	8/9/02	8/23/02	10/25/02	1/10/03					
<b>Configuration Item</b>	<b>CI No.</b>													
Core (Client)	1.1	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
Core (Server)	1.2	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
SCAURA (Client)	1.3	1.0	2.0	3.0	3.0	3.1	3.2	3.3	3.4					
SCAURA (Server)	1.4	1.0	2.0	3.0	3.0	3.1	3.2	3.3	3.4					
EOSGS (Client)	1.5	1.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0					
EOSGS (Server)	1.6	1.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0					
IP Input (Client)	1.7	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
IP Input (Server)	1.8	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
IP Output (Client)	1.9	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
IP Output (Server)	2.0	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
Logging (Client)	2.1	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
Logging (Server)	2.2	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					

Delivery Date		3/16/01	6/15/01	9/28/01	1/11/02	8/9/02	8/23/02	10/25/02	1/10/03					
Configuration Item	CI No.													
Scenario (Client)	2.3	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
Scenario (Server)	2.4	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
Serial Input (Client)	2.5	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
Serial Input (Server)	2.6	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
Serial Output (Client)	2.7	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
Serial Output (Server)	2.8	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
TxFile (Client)	2.9	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
TxFile (Server)	3.0	4.0	4.1	5.0	6.0	6.0	6.0	7.0	7.0					
vcProcessor (Client) <sup>1</sup>	3.1		4.1	5.0	6.0	6.0	6.0	7.0	7.0					
vcProcessor (Server) <sup>1</sup>	3.2		4.1	5.0	6.0	6.0	6.0	7.0	7.0					
EOSXtract (Client) <sup>2</sup>								1.0	1.0					
EOSXtract (Server) <sup>2</sup>								1.0	1.0					
E1553 (Client) <sup>2</sup>								1.0	2.0					
E1553 (Server) <sup>2</sup>								1.0	2.0					

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<sup>1</sup> Added with Release 2.0

<sup>2</sup> Added with Release 3.3



## **Attachment G — Mission Systems Configuration Management Form**

This attachment contains the completed Mission Systems Configuration Management (MSCM) form for the delivery of MPS/Aura Release 3.4.

### Mission Systems Configuration Management Form

<u>1. ORIGINATOR</u> Estelle Noone	<u>2. ORGANIZATION</u> CSC	<u>3. PHONE</u> 301-805-3653	<u>4. E-MAIL ADDRESS</u> <a href="mailto:enoone@csc.com">enoone@csc.com</a>
<u>5. ELEMENT</u> ETS (MPS/Aura)		<u>6. INSTALLATION PRIORITY</u> Routine	<u>7. TRACKING NUMBER</u> (Assigned by CM Office)
<u>8. SOURCE CHANGE REQUEST(S):</u> ETS delivery of MPS for EOS Aura (MPS/Aura)		<u>9. APPROVALS</u> <div style="display: flex; justify-content: space-between;"> <div>Element Manager</div> <div>_____</div> <div>____/____/____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Flight Ops Director</div> <div>_____</div> <div>____/____/____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Operations Manager</div> <div>_____</div> <div>____/____/____</div> </div>	
<u>10. DELIVERED SYSTEM</u> (Check all that apply)			
	Name	Version	Media Identification
<input type="checkbox"/> Hardware	_____	_____	_____
<input checked="" type="checkbox"/> Software	MPS/Aura	R3.4	CD-ROM
<input type="checkbox"/> Database	_____	_____	_____
<input checked="" type="checkbox"/> Documentation:			
	MPS/Aura delivery package	N/A	via email
	MPS/Aura Release 3.4 User's Guide	R3.4	<a href="http://esdis-it.gsfc.nasa.gov/ETS/etsdoc.html">http://esdis-it.gsfc.nasa.gov/ETS/etsdoc.html</a>
	_____	_____	_____
<input type="checkbox"/> Other	_____	_____	_____
<u>11. CHANGE DESCRIPTION</u> Release 3.4 of MPS/Aura _____ _____ _____			
<u>12. ATTACHMENT(S):</u> Check if YES <input checked="" type="checkbox"/> Description: MPS/Aura Release 3.4 delivery package (cover letter with attachments) dated 1/10/03 _____ _____			
<u>13. CM OFFICE USE</u>			
	Location (Bldg/Room)	Slot location(s)	
Hardware	____/____	_____	
Media	____/____	_____	
Documentation	____/____	_____	
Installation date	____/____/____	CM Office Signature _____	

Form MSCM (970327)